HERCULES, INC. (GIBBSTOWN PLANT) NEW JERSEY EPA ID# NJD002349058

EPA REGION 2
CONGRESSIONAL DIST. 01
Gloucester County
Gibbstown

Other Names: Higgins Plant

Site Description

The 350-acre Hercules, Inc. (Gibbstown Plant) site operates as an organic hydroxide/peroxide manufacturing facility. An unlined solid waste disposal area used by Hercules from 1952 to 1974, and used by DuPont prior to 1952, is on the site. The companies disposed of waste materials from manufacturing processes including waste resulting from the production of aniline in two unlined disposal pits. In 1980, the U.S. Geological Survey conducted tests of the aquifer underneath the site. The groundwater was found to be contaminated with volatile organic compounds (VOCs). Hercules is located in an undeveloped area on the banks of the Delaware River. Approximately 13,000 people live within a 3-mile radius of the site. Area residents are served by municipal water wells. Clonmell Creek runs through the site and discharges into the Delaware River.

Site Responsibility: This site is being addressed through

Federal, State, and potentially responsible parties' actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82 Final Date: 09/01/83

Threats and Contaminants



In some areas of the site, groundwater was found to be contaminated with benzene, cumene and phenols. Lead was also detected in the groundwater. Soil was found to be contaminated with VOCs and heavy metals including lead. Area residents are supplied

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with water by municipal water wells that do not contain contaminants above health-based levels. However, if the contamination in the aquifer migrates, these wells may be threatened. If pollutants leach from the disposal area into the surrounding wetlands or Clonmell Creek, wildlife may be harmed.



Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on cleanup of the solid waste disposal area and cleanup of the process plant area.

Response Action Status -

Solid Waste Disposal Area: Hercules, under State monitoring, has completed an investigation to determine the nature and extent of contamination in the solid waste disposal area. Eleven monitoring wells have been constructed in this area as part of this investigation. A Record of Decision (ROD) selecting a remedy for contamination in the solid waste disposal area was signed by the State in January 1996. The selected remedy includes consolidation of miscellaneous waste in the solid waste disposal area on the two existing tar pits, capping of the waste, and the covering of contaminated sediment in the North Ditch with a layer of clean imported fill. The design of this remedy is currently being conducted by Hercules, Inc.

Plant Process Area: Hercules, under State monitoring, is treating contaminated groundwater and has completed an investigation of the nature and extent of contamination in and around the manufacturing plant area. Additional investigations of site contamination are ongoing. An assessment of risk to human health and the environment presented by contamination in this area of the site and an evaluation of alternatives for remediation of the manufacturing plant area will be conducted.

Site Facts: In 1984, Hercules commenced operation of a groundwater extraction and treatment system (System) in the Plant Process Area of the site. An Administrative Order on Consent (ACO) was issued by the State in 1986 to Hercules to take responsibility for investigating the nature and extent of site contamination, to evaluate cleanup alternatives for both areas of the site, and to continue operation of the System. Another ACO was issued by the State in October 1996, which requires Hercules to design and implement the remedy selected in the January 1996 ROD.

Cleanup Progress



(Threat Mitigated by Physical Clean-up Work)

Operation of the groundwater pump and treat system in the Plant Process Area of the site has minimized migration of site-related groundwater contamination, thereby mitigating contamination of municipal wells which provide drinking water for residents in the vicinity of the site. From 1987 through 2000, the System recovered and treated over 1.48 billion gallons of contaminated groundwater. Continued operation of the System will mitigate impact to municipal wells in the future.

Implementation of the remedy selected for the Solid Waste Disposal Area of the site will minimize the potential for direct contact with the waste material through consolidation of the waste and installation of a cap over the waste material.